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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

JC10 Rec'd PCT/PTO 19 MAR 2002

attachment

In re application of: Shizuo AKIRA et al.

Appl. No.: Unassigned

Filing Date: March 19, 2002

For: RECEPTOR PROTEIN
SPECIFICALLY RECOGNIZING
BACTERIAL DNA

Art Unit: Unassigned

Examiner: Unassigned

Atty. Docket No.: 31671-178057

Customer No.



26694

PATENT TRADEMARK OFFICE

Information Disclosure Statement

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

This is an Information Disclosure Statement submitted under 37 C.F.R. § 1.97
within the time specified under 37 C.F.R. § 1.97(b).

In order to comply the duty of disclosure pursuant to 37 C.F.R. § 1.56, submitted
herewith is a form listing the documents cited in the specification and cited in the enclosed
International Search report of International Application No. PCT/JP01/04731.

Cite Nos. AG-AI, AY, BJ-BM, BO, BP, BQ and BT which are cited in the
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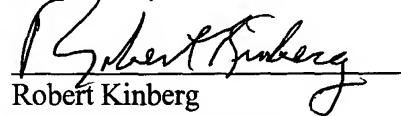
In view of the above, no further statement of relevance need be given, and as all
requirements of 37 C.F.R. § 1.97 and § 1.98, and all official guidelines pertaining to

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Shizuo AKIRA et al.
31671-178057

Information Disclosure Statements have been complied with, it is respectfully requested that the Examiner consider the cited publications and make them of record.

Date: 3/19/02

Respectfully submitted,



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	AA	Carl HASHIMOTO et al., "The Toll Gene of Drosophila, Required for Dorsal-Ventral Embryonic Polarity, Appears to Encode a Transmembrane Protein", Cell, Vol. 52, 269-279, January 29, 1988		
	AB	Marcia P. BELVIN et al., "A CONSERVED SIGNALING PATHWAY: The Drosophila Toll-Dorsal Pathway", Annu. Rev., Cell Dev. Biol. 12, pages 393-416, 1996		
	AC	Bruno LEMAITRE et al., "The Dorsalventral Regulatory Gene Cassette spätzle/Toll/cactus Controls the Potent Antifungal Response in Drosophila Adults", Cell, Vol. 86, pages 973-983, September 20, 1996		
	AD	Scientific Correspondence, Nature 351, pages 355-356, May 31, 1991		
	AE	Luke A. J. O' NEILL et al., "Signal transduction pathways activated by the IL-1 receptor family: ancient signaling machinery in mammals, insects, and plants", J. Leukoc. Biol. 63, pages 650-657, June 1988		
	AF	Rusian MEDZHITOV et al., "A human homologue of the Drosophila Toll protein signals activation of adaptive immunity", Nature, Vol. 388, pages 394-397, July 24, 1997		
	AG	Fernando L. ROCK et al., "A family of human receptors structurally related to Drosophila Toll", Proc. Acad. Sci. USA 95, pages 588-593, January 1998		
	AH *	Preet M. CHAUDHARY et al., "Cloning and Characterization of Two Toll/Interleukin-1 Receptor-Like Genes TIL3 and TIL4: Evidence for a Multi-Gene Receptor Family in Humans", Blood, Vol. 91, pages 4020-4027, June 1998		
	AI *	O. TAKEUCHI et al., "TLR6: A novel member of an expanding Toll-like receptor family", Gene 231, pages 59-65, 1999		
	AJ	Marta MUZIO et al., "The Human Toll Signaling Pathway: Divergence of Nuclear Factor KB and JNK/SAPK Activation Upstream of Tumor Necrosis Factor Receptor-associated Factor 6 (TRAF6)", J. Exp. Med. 187, pages 2097-2101, June 15, 1998		
	AK	Rusian MEDZHITOV et al., "MyD88 Is an Adaptor Protein in the hToll/IL-1 Receptor Family Signaling Pathways, Molecular Cell, Vol. 2, pages 253-258, August 1998		

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Application Number	Unassigned
Filing Date	March 19, 2002
First Named Inventor	Shizuo AKIRA et al.
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Examiner Name	Unassigned

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	AL	Taro KAWAI et al., "Unresponsiveness of MyD88-Deficient Mice to Endotoxin", Immunology, Vol. 11, pages 115-122, July 1999	
	AM	Rusian MEDZHITOV et al., "Innate Immunity: The Virtues of a Nonclonal System of Recognition", Cell, Vol. 91, pages 295-298, October 31, 1997	
	AN	David C. MORRISON et al., "Bacterial Endotoxins and Host Immune Responses", Advances In Immunology, Vol. 28, pages 293-450, 1979	
	AO	R.J. ULEVITCH et al., "Receptor-Dependent Mechanisms of Cell Stimulation by Bacterial Endotoxin", Annu. Rev. Immunol. Vol.13, pages 437-457, 1995	
	AP	Samuel D. WRIGHT, "CD14, a Receptor for Complexes of Lipopolysaccharide (LPS) and LPS Binding Protein", Science 249, pages 1431-1433, September 21, 1990	
	AQ	Katsuaki HOSHINO et al., "Cutting Edge: Toll-Like Receptor 4 (TLR4)-Deficient Mice Are Hyporesponsive to Lipopolysaccharide: Evidence for TLR4 as the Lps Gene Product", J. Immunol. 162, pages 3749-3752, 1999	
	AR	Osamu TAKEUCHI et al., "Differential Roles of TLR2 and TLR4 in Recognition of Gram-Negative and Gram-Positive Bacterial Cell Wall Components", Immunity, Vol.11, pages 443-451, October 1999	
	AS	Arthur M. KRIEG, "Lymphocyte activation by CPG dinucleotide motifs in prokaryotic DNA", Trends In Microbiology, Vol. 4, No. 2, pages 73-76, February 1996	
	AT	Grayson B. LIPFORD et al., "Bacterial DNA as immune cell activator" Trends In Microbiology, Vol. 6, No. 12, pages 496-500, December 1998	
	AU	Hans HÄCKER et al. "Cell type-specific activation of mitogen-activated protein kinases by CpG-DNA controls interleukin-12 release from antigen-presenting cells", EMBO J., Vol. 18, No. 24, pages 6973-6982, 1999	
	AV	Thilo JAKOB et al., "Activation of Cutaneous Dendritic Cells by CpG-Containing Oligodeoxynucleotides: A Role for Dendritic Cells in the Augmentation of Th1 Responses by Immunostimulatory DNA," J. Immunol. 161, pages 3042-3049, 1998	

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	AW	G. HARTMAN et al., "CpG DNA: A potent signal for growth, activation, and maturation of human dendritic cells", Proc. Natl. Acad. Sci. USA 96, pages 9305-9310, August 1999		
	AX	Hermann WAGNER, "Bacterial CpG DNA Activates Immune Cells to Signal Infectious Danger", Adv. Immunol., Vol. 73, pages 329-368, 1999		
	AY	Arthur M. KRIEG, "The role of CpG motifs in innate immunity", Curr. Opin. Immunol. 12, pages 35-43, 2000		
	AZ	"Continuous cultures of fused cells secreting antibody of predefined specificity", Nature Vol. 256, pages 495-497 August 7, 1975		
	BA	Danuta KOZBOR et al., "The production of monoclonal antibodies from human lymphocytes", Immunology Today, Vol. 4, No. 3, page 72, 1983		
	BB	S.P.C. COLE et al., "The EBV-Hybridoma Technique and Its Application to Human Lung Cancer", Monoclonal Antibodies and Cancer Therapy, pages 77-96, Alan R. Liss, Inc. 1985		
	BC	Leonard DAVIS et al., "Basic Methods In Molecular Biology", 2nd Edition, 1986, cover and bibliographic pages only		
	BD	France PIETRI-ROUXEL et al., "The biochemical effect of the naturally occurring Trp64-Arg mutation on human β3-adrenoceptor activity", Eur. J. Biochem., 247, pages 1174-1179, 1997		
	BE	Shin TAKAGI et al., "Expression of a Cell Adhesion Molecule, Neuropilin, in the Developing Chick Nervous System", Dev. Biol. 170, pages 207-222, 1995		
	BF	Atsushi KAWAKAMI et al., "Developmentally Regulated Expression of a Cell Surface Protein, Neuropilin, in the Mouse Nervous System", J. Neurobiol., Vol. 29, No. 1, pages 1-17, 1996		
	BG	Makoto MATSUMOTO et al., "A Novel LPS-Inducible C-Type Lectin Is a Transcriptional Target of NF IL6 in Macrophages!", J. Immunol. 163, pages 5039-5048, 1999		

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	BH	Kayo INABA et al., "Generation of Large Numbers of Dendritic Cells from Mouse Bone Marrow Cultures Supplemented with Granulocyte/Macrophage Colony-stimulating Factor", J. Exp. Med., Vol. 176, December 1992		
	BI	Taro KAWAI et al., "Unresponsiveness of MyD88-Deficient Mice to Endotoxin", Immunity, Vol. 11, pages 115-122, July 1999		
	BJ	Hiroaki HEMMI et al., "A Toll-like receptor recognizes bacterial DNA", Nature, Vol. 408, pages 740-745, December 7, 2000		
	BK	Xin DU et al., "Three novel mammalian toll-like receptors: gene structure, expression, and evolution" Eur. Cytokine Netw., Vol. 11, No. 3, pages 362-371, September 2000		
	BL	Gerard T. HARDIMAN et al., WO98/50547 (AU 9871754, EP980429)		
	BM	Elizabeth B. KOPP et al., "The Toll-receptor family and control of innate immunity", Curr. Opin Immunol. 11, pages 13-18, 1999		
	BN	Fernando L. ROCK et al., "A family of human receptors structurally related to Drosophila Toll", Proc. Natl. Acad. Sci. USA 95, pages 588-593, January 1998		
	BO	Douglas T. FEARON, "Seeking wisdom in innate immunity", Nature, Vol. 388, pages 323-324, July 24, 1997		
	BP	WO99/51259 (AU9934678, EP1067956, US6218371)		
	BQ	Osamu TAKEUCHI et al., "Cellular responses to bacterial cell wall components are mediated through MYD88-dependent signalling cascades", Int. Immunol. 12, No. 1, pages 113-117, 2000		
	BR *	LADNER et al., "Single Polypeptide Chain Binding Molecules", U. S. Patent No. 4,946,778, August 7, 1990		

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